

Name: _____

pa1030: Box multiplication of linear binomials (v10)

Example

Use the box method to multiply $(6x + 3)$ and $(2x + 4)$.

*	6x	3	
2x	$12x^2$	6x	$12x^2 + 6x + 24x + 12$
4	24x	12	Combine like terms.
			$12x^2 + 30x + 12$

ANSWER: $12x^2 + 30x + 12$

Question 1

Use the box method to multiply $(4x + 2)$ and $(3x + 5)$.

*	4x	2	
3x	$12x^2$	6x	
5	20x	10	

ANSWER: $12x^2 + 26x + 10$

Question 2

Use the box method to multiply $(-8x + 7)$ and $(4x + 3)$.

*	$-8x$	7
4x	$-32x^2$	$28x$
3	$-24x$	21

ANSWER: $-32x^2 + 4x + 21$

Question 3

Use the box method to multiply $(6x + 8)$ and $(-7x - 4)$.

*	$6x$	8
$-7x$	$-42x^2$	$-56x$
-4	$-24x$	-32

ANSWER: $-42x^2 - 80x - 32$